

REMARKS

Claims 2-21 are pending. By this Amendment, claims 2, 6, 8, 12, 15-17 and 21 are amended by being re-written in independent form and claim 1 is cancelled with out prejudice or disclaimer of the subject matter therein. Claim 2 is amended to overcome the objection thereto. Claim 20 is amended to depend from claim 2. No new matter is involved.

Applicants acknowledge with appreciation the indication of allowable subject matter in claims 8-14. Applicants have re-written claims 8 and 12 in independent form, so they should be promptly allowed, as should claims 9-11 and 13 and 14, depending, respectively, therefrom.

The Office Action objects to the specification allegedly because Applicants have not filed an Abstract, in compliance with 37 CFR §1.72(b). Applicants respectfully traverse this objection because they did file an Abstract on a separate page of this PCT Application. Applicants enclose a copy of the Abstract which was filed as page No. 72 of this Application.

The Office Action objects to claim 3 because the word "can" in line 2 of claim 3 renders claim 3 indefinite. This objection is respectfully traversed.

In the first place, claim 3 does not recite "can." However, claim 2 does. Under the circumstances, Applicants have amended claim 2 to recite --. . . the controlling device is adapted to control the amount of . . ." Such language is perfectly proper and constitutes a properly recited feature of the invention. In this regard, see Dennison Manufacturing Company v. Ben Clements and Sons, Inc., 203 USPQ 895, footnote 7 (DC SNY 1979), which stated that the "adapted to be severed externally of an attaching device" language is a structural limitation, not merely a description of where the severing is to take place, citing In re Venezia, 530 F.2d 956, 958-59, 189 USPQ 149, 151-152 (C.C.P.A. 1976).

Applicants respectfully submit that this amendment does not limit the scope of original claim 2 in any way.

The Office Action rejects claims 1-3, 6 and 7 under 35 USC §102(b) as anticipated by U.S. Patent 5,489,319 to Tokuda et al. (hereinafter, Tokuda). This rejection is respectfully traversed.

The rejection is moot with respect to claim 1, which has been canceled without prejudice or disclaimer.

In order for an invention to be anticipated, the same device, including all claim limitations, must be shown to exist in a single prior art reference in which every element of the claimed invention is literally present, arranged as in the claim. Richardson v. Suzuki Motor Co., Ltd., 868 F.2d 1226 [9 USPQ2d 1913] (Fed. Cir. 1989), cert. denied, 493 U.S. 853 (1989).

Claim 2 recites, among other features, "means for judging if the particulate filter will be deteriorated by heat derived from the oxidation of the particulates." Tokuda does not disclose this feature, expressly or inherently. (1)

Tokuda only mentions oxidation of the particulates in col. 1, lines 43-45 in the context of related art, and then only to the extent that the filter 83 (of carbon or soot components) is heated up by an electric filter installed in the filter 83 to burn up carbon components trapped in the filter and to reactivate the filter 83.

Tokuda is primarily interested in preventing his ceramic filter 83, which is taught as being very weak against a rapid change in temperature, from cracking due to a rapid change in temperature - see col. 2, lines 29-54. Tokuda measures the temperature of the filter and the temperature of the gas flowing to the filter and uses that difference to ensure that the ceramic filter is not heated too rapidly to crack. As stated in col. 5, lines 27-32, Tokuda prevents a great amount of exhaust gas of high temperature from rapidly flowing into the filter and by gradually increasing the temperature of the filter, prevents cracking of the ceramic filter.

Tokuda simply is not concerned with protecting his filter from deterioration due to heat generated by oxidation of particulates on the filter, and does not determine if his particulate filter will be deteriorated by heat from the oxidation of the particulates.

(2)

Claim 3 depends from claim 2 and is not anticipated by Tokuda for at least the reasons stated above. Claim 6 also recites among other features, "means for judging if the particulate filter will be deteriorated by heat derived from the oxidation of the particulates." Tokuda does not disclose this feature, expressly or inherently, as discussed above.

Accordingly, claims 1-3, 6 and 7 are not anticipated by Tokuda.

The Office Action rejects claims 1, 6 and 7 under 35 USC §102(b) as being clearly anticipated by U.S. Patent 5,582,002 to Pattas. This rejection is respectfully traversed.

In the first place, rejection of the same claims (claims 1, 6 and 7) with different references, where there is no legitimate reason to do so, is strictly prohibited by the Manual of Patent Examining Procedure - see MPEP §706.02, in the section labeled "Choice of Prior Art: Best Available."

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(3)

Applicants were subjected to an improper restriction requirement in the first Office Action and now are being subjected to improper plural rejections on different art. Applicants respectfully request that the Office follow its own policies and procedures and, with respect to the rejections of record, withdraw these unduly multiplicitous and unauthorized prior art rejections.

This rejection is moot with respect to claim 1, which has been canceled.

This rejection is improper with respect to claims 6 and 7, which recite that the judging means judges that the particulate filter will be deteriorated by heat when the temperature of the particulate filter is higher than a predetermined temperature. Pattas does not disclose measuring the temperature of its filters 2, 4 and 6. Rather, Pattas measures the temperature of the exhaust gas downstream of the of the diesel soot filters to determine if the

(4)

temperature of the exhaust gas exceeds the maximum admissible exhaust gas temperature - see col. 3, lines 28-32. Pattas does not disclose, explicitly or inherently, determining the temperature of the particulate filter or that it is above a certain threshold. Accordingly, Pattas does not anticipate claims 6 and 7.

In view of the foregoing, the rejection of claims 6 and 7 under 35 USC §102(b) as anticipated by Pattas is improper and should be withdrawn.

The Office Action rejects claims 4 and 5 under 35 USC §103(a) as unpatentable over Tokuda in view of "official notice." This rejection is respectfully traversed.

Applicants were subjected to an improper restriction requirement in the first Office Action and now are being subjected to yet another improper plurality of rejections on different art. Applicants respectfully request that the Office follow its own policies and procedures and, with respect to the rejections of record, withdraw these unduly multiplicitous and unauthorized prior art rejections.

As noted above, rejection of the same claims (claims 1, 6 and 7) with different references, where there is no legitimate reason to do so, is strictly prohibited by the Manual of Patent Examining procedure - see MPEP §706.02, in the section labeled "Choice of Prior Art: Best Available."

Claims 4 and 5 depend from claim 2, and Tokuda does not render claim 2 unpatentable for the reasons stated above. Moreover, What is allegedly taught by "official notice" does not address the shortcomings of Tokuda which are set forth above.

Accordingly, the rejection of 4 and 5 under 35 USC §103(a) as unpatentable over Tokuda in view of "official notice" is improper and should be withdrawn at least for the reasons stated above regarding the failure of Tokuda to anticipate the subject matter of claim 2.

The Office Action rejects claims 1, 6, 7 and 15 under 35 USC §103(a) as anticipated by, or in the alternative, under 35 USC §103(a) as unpatentable over U.S. Patent 3,189,417 to Houdry et al. (hereinafter, "Houdry"). This rejection is respectfully traversed. *moot!*

The rejection is moot with respect to claim 1, which has been canceled. *withdraw*

In the first place, the Office Action fails to make out a prima facie case that Houdry's catalytic converter is "a particulate filter arranged in the exhaust gas passage for removing particulates in exhaust gas," as recited in claims 6, 7 and 15. Merely asserting that Houdry's catalytic converter is a particulate filter "since soot is trapped and oxidized within the catalyst pellets (22)" does make that statement so. Houdry never indicates that "soot" is in his exhaust gas. In the second place, it is well settled that a rejection cannot be based on speculation. A factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See, In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). *5*

In the third place, Houdry does not disclose or suggest means for judging if the particulate filter will be deteriorated by heat derived from the oxidation of the particulates, as recited in claims 6, 7 and 15. The referenced portion of Houdry relied on in this rejection only discusses "oxidation of the gases," not oxidation of filter particulates.

Furthermore, with respect to claim 7, Houdry does not discuss ignition of particulates in the catalytic converter (allegedly, according to the Office Action, a particulate filter).

Accordingly, claims 6, 7 and 15 are not anticipated, or rendered obvious, by Houdry and this rejection is improper and should be withdrawn.

The Office Action rejects claims 16-21 under 35 USC §103(a) as unpatentable over Tokuda in view of U.S. Patent 6,167,696 to Maaseidvaag et al. (hereinafter, "Maaseidvaag"). This rejection is respectfully traversed.

In the first place, Tokuda does not render claim 16 unpatentable at least because claim 16 recites, among other features, "means for judging if the particulate filter will be deteriorated by heat derived from the oxidation of the particulates." Tokuda does not disclose this feature, expressly or inherently.

Tokuda only mentions oxidation of the particulates in col. 1, lines 43-45 in the context of related art, and then only to the extent that the filter 83 (of carbon or soot components) is heated up by an electric filter installed in the filter 83 to burn up carbon components trapped in the filter and to reactivate the filter 83.

Tokuda is primarily interested in preventing his ceramic filter 83, which is taught as being very weak against a rapid change in temperature, from cracking due to a rapid change in temperature - see col. 2, lines 29-54. Tokuda measures the temperature of the filter and the temperature of the gas flowing to the filter and uses that difference to ensure that the ceramic filter is not heated too rapidly to crack. As stated in col. 5, lines 27-32, Tokuda prevents a great amount of exhaust gas of high temperature from rapidly flowing into the filter and by gradually increasing the temperature of the filter, prevents cracking of the ceramic filter.

Tokuda simply is not concerned with protecting his filter from deterioration due to heat generated by oxidation of particulates on the filter, and does not determine if his particulate filter will be deteriorated by heat from the oxidation of the particulates.

Maaseidvaag does not supply the feature(s) missing from Tokuda. In fact, contrary to the assertions in the Office Action, Maaseidvaag fails to disclose a particulate filter that traps "soot" - see this assertion on page 8, line 7 of the outstanding Office Action. The Maaseidvaag patent does not even contain the word "soot."

So, to the extent that the rejection asserts that it would be obvious to modify Tokuda to use Maaseidvaag's filter in Tokuda to purify both soot and NO_x emissions, it is in error, improper and should be withdrawn.

Additionally, because Tokuda is directed to a diesel engine and Maaseidvaag does not disclose a diesel engine, the Office Action fails to provide proper motivation to combine these two references. Moreover, because Tokuda does not disclose using a catalytic converter, the Office Action fails to make out a prima facie case that it would be obvious to place a filter with a three-way catalyst in Tokuda.

It appears that this rejection is based on improper hindsight reconstruction of Applicants' invention based solely on Applicants' disclosure.

Accordingly, claims 16-21 are patentable over Tokuda and Maaseidvaag.

For the aforementioned reasons, Applicants respectfully submit that claims 2-7 and 15-21, in addition to allowable claims 8-14, are patentable and should be allowed.

Should the Examiner believe that anything further is needed to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



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JAO:RJW/sxb

Attachment:
Abstract

Date: September 30, 2003

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